



# Maine Farmer.

S. L. BOARDMAN, Agricultural Editor.

Agricultural Notices.

MAINE POULTRY ASSOCIATION.—Third Exhibition at City Hall, Portland, Jan. 26-28, 1876.

MAINE POMOLOGICAL SOCIETY.—Adjourned Annual Meeting at the Secretary's office, Wiscasset, Wednesday, Dec. 22.

OLSON SCIENTIFIC SOCIETY.—Semi-Annual Meeting at the College Chapel, Orono, Tuesday, March 10, 1876.

LINCOLN COUNTY AGRICULTURAL SOCIETY.—Special Meeting at Danville, Wednesday, February 23, 1876.

EASTERN KENNEBEC AGRICULTURAL SOCIETY.—Annual Meeting at the Orono, Orono, Saturday, January 15, 1876, at 10 o'clock, A. M.

## Hay.

We have come to the conclusion that cows are pretty good judges of hay—although we have no claim to originality of discovery in the matter. Harris Lewis, in one of his practical lectures, says in a quaint way that he has found on trying certain experiments in feeding his cows, "that they knew more than he did;" and are enough, why should they not? Should not they be as good judges of what they like to eat as we are of what we like to eat? And with our superior judgment, as we think, would it not seem from feeding cows and other stock winter after winter, that we should learn something of their requirements, and profit by it? We might if we thought at all, but we don't think. We feed out the hay, then clean the cows from the manger, and never put two clear thoughts together in doing it—month in and month out, all winter long.

Now we have limited this critical judgment of the quality of food to the cow—which to us seems about right. Horses which are fed largely on grain require but little hay any way; young, growing stock, will eat rough and coarse fodder with avidity, not stopping to question if it was cut early, and is free from that musty smell so unpleasant to us, as we throw it from the nose; and sheep are somewhat indiscriminate feeders, and will thrive on what we call poor hay, if it is not the best in quality, if it is not sweet—house-bred becoming wet from rains. But the cow yielding milk is particularly so; as though she knew the successful secretion of milk could not go on if she was in poor flesh, and that good food, which is not maintained on poor hay. It is true many cows that are deep milkers are never in that condition of a cow that is well fed and gives a large flow of milk, and to them it is this and poor, which, compared to their summer feed of good pasture, is as stones and bread—almost.

If we could feed our milk cows with dry forage, note the result of their eating it, and then immediately go out and put these results into service in cutting and curing the grass crop, we might learn something. But grass don't grow in winter just when we are feeding poor hay, and when hay comes round, again we forget the dry sticks, otherwise stalks of so called hay—which are fit to feed nothing but a wood stove, and so our poor cows go on eating and digesting miserably, which, compared to their summer feed of good pasture, is as stones and bread—almost.

Hay which rattles when you throw it into the floor, and of which a large proportion is left as dead and dry stalks in the crib—or in other words, which has been cut after the first frost, is not fit for a cow to eat. It may sustain life, but it will afford little nourishment and yield little milk—and we keep cows for profit, not for the purpose of starving them through the winter to pay taxes on them in April. And when fed this poor hay in connection with poor milk, it is the meat and shorts which give the profit of yield to the animal and gives a sort of ballast useful in maintaining an upright position. The fact that cattle in winter, confined on dry forage, consume a much larger amount of hay than is equivalent to the same relative quantity of grass, is sufficient evidence of the imperfect manner in which grass is cut and cured for hay. An animal which can subsist on one hundred pounds of grass, should be able to retain the same condition by the use of twenty-five pounds of hay. If the hay is of inferior quality, the value of the ration is reduced. But the experiments of Dr. Robert Thompson on this subject, proved that a cow thriving on 100 to 120 lbs. of grass, required 25 lbs. of hay, and in addition nine pounds of barley or malt—a conclusive proof of the loss of nutrition in the grass by the imperfect process of curing for hay.

Now why not a little experimenting be done by every farmer, which will determine this matter of the cutting and curing of grass, to a dead certainty? Let us propose: Take an acre of grass of fair and uniform quality, cutting one-half of it on a good hayday, say June 20th, 1876—provided it don't come on Sunday—making it well and putting it in a place in the barn where it may be fed out by itself just when wanted. Now cut the other half acre July 20th, and place it by itself in the barn. Feed a good cow two weeks in winter on the hay last cut, weighing her product of milk; then feed her two weeks on the hay first cut, weighing her product in milk and comparing the amount given for the two periods. This is simple enough, will take but little time and be but little trouble; but, however, will be a pretty conclusive answer to your question, "What time shall we cut grass for hay?" and your cow will tell you which she likes best.

## A Significant Answer.

Among the questions included in a circular forwarded to our cheese factories, for the purpose of gathering information in regard to the seasons' operations and other matters, was this one: "What breed of cows is preferred?"—and it is noticeable that on other point are the answers received so diverse. It is true there are numerous instances of thoroughbred cows of different breeds, giving remarkable yields in both milk and butter—but a fair inference to be drawn from replies to the above question, would be that far all the efforts of our breeders to produce a breed of cows that should take precedence over all others for the average farmer, to speak—or for purposes of cheese factories, to keep—had not

## Some Handsome Apples.

Mr. Joseph Howard of this town—whose farm is situated near the Sidney line—is one of those men who have lately been "converted" to farming, and who shows by his fruits, that he is thoroughly in earnest in the business. Upon his farm is an orchard, the trees of which have been set thirty or forty years, on strong, clayey loam soil, the land having an eastern incline. About six years ago Mr. Howard began to think something could be made of the old orchard; so he set to work pruning and grafting, and manuring and mulching and fixing it up, and he became so much in love with the work that he began to set out a few young trees. In 1874 he raised over eighty bushels of grafted fruit, from scions set four and five years. Encouraged by his success he kept on setting young trees, and mulching and fixing the border and other insects from his old ones, and this year raised thirty bushels of choice fruit—it is an "off year" too—for some of which he gets \$2 per bushel which is a great deal. The young trees set are all natives. A few days since Mr. Howard made a display upon our counter, of samples of apples grown by him the past season—and a fine display it was. We saw a number of fruit exhibitions, out and out. He showed specimens of the Baldwin, Bellflower, Northern Spy, Golden Seedling, Fall Greening, Nodhead and some other sorts—all large and handsome, of rich color, sound and fragrant. He now has about 300 trees, and is increasing his orchard at the rate of about forty trees a year. The more such farmers as Mr. Howard, and the more such fruit grown as he raises, the better.

## Personnel of the State College.

Eight years ago the State College of Agriculture and the Mechanic Arts opened with a "Faculty" of but two persons—a Professor of Mathematics and a "Reading Professor," and a farm superintendent who was "Instructor in Agriculture"—and a class of thirteen students. In 1869 its board of instruction had been increased to five, including a professor of chemistry, teacher in book-keeping, and a non-resident lecturer of Mathematics and physics. In 1870, at the graduation of its first class, it had forty-two students, a faculty of five professors, together with a farm superintendent, military instructor, instructor in book-keeping, and four non-resident lecturers viz: on dairy farming, market gardening, entomology, and comparative anatomy and zoology. At this date it had for the first time in its history a recognized and responsible President—the duties of the position having been until this most acceptably performed by Prof. M. C. Fernald. It has now graduated four classes, has one hundred and twenty students, and a faculty of eight resident instructors. It is well that the people of Maine should know something about these professors and their ability to hold the positions they do in a college which aims to give the young men of our State a broad, liberal, substantial, scientific and practical education, and which is intended to fit them for the high industries of a useful life.

Rev. Charles F. Allen, D. D., a graduate of Bowdoin, is President of the College, and has the chair of English literature and mental and moral science. For years a member of the clergy, and a student of divinity, he is perhaps more widely and favorably known as a leading public educator, liberal and catholic in his views, of a thoroughly practical turn, and possessing those qualities of mind and heart, united to that thorough culture which admirably fits him for the position. The highest of a Christian gentleman, a friend to the young, and a lover of mankind—he has drawn to the institution many students, and hosts of friends. Prof. M. C. Fernald is a graduate of Bowdoin, a teacher of long and successful experience, and for nearly four years carried the entire instruction "on his back." He has been connected with the college since its foundation, is a strong and growing man, and ranks among the best teachers of the country in his specialties of mathematics and the physical sciences. Prof. Alfred B. Aubert has the chair of chemistry. He is a German by birth, a graduate of Cornell University, and although a young man, has special fitness for the duties of his position, which is one of prime importance to the college. The department of civil and mechanical engineering, one which has grown to large proportions and interest, is in charge of Prof. Wm. A. Pike and Geo. H. Haines. C. E. Prof. Pike is a graduate of the Massachusetts Institute of Technology, is a most accomplished instructor, and has had frequent invitations to go to other colleges. His assistant, Prof. Hamilton, is a graduate of the State College, class of '73, and a young man of positive ability, and high character. The department of botany, horticulture and natural history is in charge of Prof. Ch. H. Fernald, who received his honorary A. M. from Bowdoin, and was for many years previous to his connection with our State College, a successful teacher in Cornell University and higher schools of learning. Prof. W. S. Chaplin has the chair of modern languages, mechanics and military tactics. He is a graduate of West Point—ranking third in a class of over fifty at his graduation—and is a young man of much energy, ability and character. Without a formal connection with the college, a few of our more popular with the students, and few are of greater service to the college. He has recently had, promptly declined—to enter the army of the Khedive of Egypt for a term of three years; so it may be well understood that his high reputation as a scholar and officer is not confined to our own country. Mr. Farrington, who has been farm superintendent for the past five years, has during the past year filled the position of instructor in agriculture, to the very general acceptance of the Trustees and students. But he has too many details connected with the direct management of the farm to attend to, to allow him to do satisfactory work as instructor—and a thorough and competent teacher of the theory and practice of agriculture, is much needed at the college.

The above named gentlemen, with one exception—that of a most honorable, worthy and proper one—are all young men, men who are becoming identified with the college; who are growing up with it, and who are developing its several features of study, but being developed by their own particular work therein, to better carry out its distinctive specialties of instruction; and who are giving to the college and the State the best service of their active thought, and vigorous young manhood. Just what training they are giving the students at Orono, and just what the future settled and determined policy of the college is to be, we propose to state in a future article.

## Communications.

### Dairying in Winter.

With the mercury twenty degrees below zero, the cows shrink to the smallest compass, so that there will be less of them to milk, and the milk will be of a poorer quality. The milk room quite down to a freezing temperature, the conditions are not such as will inspire one to be very anxious in the advent of winter dairying than the actual facts will sustain him in yet. Yet a Greenland experience does not always adhere to the advent of winter, cold and grizzly as it usually is, and now that it does not need not be so. In winter weather, however, as it usually does, and as we may always expect it to do, however much we may mope and say, as we are apt to do, "There never was anything like it before." It does not so seriously interfere with dairying as it is that we are bound to old opinions and old practices, and we have worn the fetters so long, we are not likely to break away from them, and should we by chance learn the fact—we are so securely bound, that we may as well not break away, but may as well add to the winter, in a manner as to him poor notions in his head. A cow running at pasture through the summer season on a farm, will give more milk in a year on the same expense of feed, if allowed to come in early in winter. Cows which are in springing condition in the fall, or in early summer—give a good flow of milk as long as a plentiful supply of feed is furnished. The milk room in Maine is difficult to obtain late in autumn.

### Farmers' Institute in Maine.

We learn from the *Pioneer* that a Farmers' Institute, under the auspices of the New England Agricultural Society, is soon to be held at some point in this State, the time of which has not yet been definitely fixed. Lewiston will probably be the place selected, and a better one for such a meeting could not be found in this State. It is of great importance to the farmers of this State, and in the midst of a thriving agricultural community. The Institute thus far held have been largely attended, and productive of much good. Able speakers will be engaged for the occasion, and as soon as the details of the meeting have been perfected, we shall make the same known to our readers.

### Editorial Notes.

We beg pardon of the Patrons—who so far as we know are all our friends—for our ignorance in regard to the affairs of their district, which is clearly not their fault. For instance, we stated last week in announcing the meeting of the State College—that the authority of a "granger" was confined to "the affairs of State Granges and their branches"—but we are now corrected by another "granger," who informs us while the above can only be acting members of the State Grange, "all fourth grade members in good standing"—that is, who have paid their dues, are entitled to admission to the meetings, and are entitled to vote. We are only sorry this correction comes so late for us to make it public before the meeting takes place; as, if we had known before about this "fourth grade" and "payment of dues" matter, it would have been a pleasure to have stated it in connection with our notice last week, and thus possibly helped to save several of the attendees from the meeting. But of course those who are grangers knew all this before.

Free publications contain so large an amount of useful and practical information, in so good a form, and for so reasonable a price as the *Boston Journal of Chemistry*; a monthly of 20 quarto pages, devoted to the science of the house and the laboratory, and, furnished at \$1 per year. All the articles are interesting and valuable, and every page contains something useful. It is edited by Dr. James R. Nichols, one of the most accomplished chemists in the country, and published by Billings, Clapp & Co., 135 Milk St., Boston.

We feel again compelled to state, what we presume is generally understood, that we do not hold ourselves responsible for the statements of correspondents. We allow the greatest liberty in the use of our columns, leaving the public to judge upon the merits of whatever discussion may be there carried.

At the date of publication of the last report of the Maine State College, December, 1874, the valuation of the live stock upon the farm was \$4,388. The stock has increased in numbers and value during the year just closing, as the report of the Farm Superintendent will undoubtedly show. The valuation of the live stock on the farm at the close of the year was \$5,400. The increase in value was \$1,012.

### Jersey Herd Book Registry.

"Winthrop Breeder of Jersey" is glad to have Gen. Fenton inform your "ungrateful" subscribers that the "progeny of two thoroughbreds" are "possibly be graded," and the cow "Sunshine" might have been graded before she was "lost." The certificates you publish show plainly that while the sire and dam of "the cow Sunshine" are registered, she is not. Sunshine is not the only imported Jersey not registered, as appears from the 2d vol. of the Jersey Herd Book, as follows:—"At a meeting of the Jersey Herd Book Committee held on July 16th, 1875, it was decided that certain individuals have falsely issued certificates purporting to be extracts from the Herd Book, and that the committee have resolved to establish the following regulations:—1st. That no certificate shall be issued for any animal until it has been examined and approved by the committee. 2nd. That no certificate shall be issued for any animal until it has been examined and approved by the committee. 3rd. 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